

In the Claims:

Claims 1-19 are canceled without prejudice.

Claim 20 is amended.

Claims 20-29 are pending and are listed as follows:

1.-19. (Canceled)

20. (Currently Amended) ~~The method as recited in claim 19~~ A method for rendering a scene that includes gaseous phenomena, the method comprising:

determining a travel distance value through at least one fog object from a reference point to a pixel;

converting the travel distance value to a fog factor value; and

determining a pixel color value for the pixel based on the fog factor value,

whereby the scene can be rendered using the determined pixel color,

wherein the fog object is bounded by a front face and a back face, and

wherein the determining a travel distance value comprises:

initializing the pixel color value;

determining a back distance value from the reference point to the back face of the fog object and adding the back distance value to a color buffer value; and

determining a front distance value from the reference point to the front face of the fog object and subtracting the front distance value from the color buffer value, wherein the final color buffer value represents a scaled travel distance through the fog object.

21. (Previously presented) The method as recited in claim 20 wherein the front distance value and the back distance value are determined using a linear equation.

22. (Original) The method as recited in claim 21 wherein the travel distance is converted to the fog factor by solving a linear equation.

23. (Original) The method as recited in claim 21 wherein the travel distance is converted to the fog factor by solving an exponential equation.

24. (Original) The method of claim 21 wherein the travel distance is converted to the fog factor by solving an exponential-squared equation.

25. (Previously presented) A computer usable storage medium having stored therein instructions configured to render images including gaseous phenomena having atmospheric effects by causing one or more processors to:

determine a travel distance value through at least one fog object from a reference point to a pixel, wherein the fog object is bounded by a front face and a back face;

convert the travel distance value to a fog factor value; and

determine a pixel color value for the pixel based on the fog factor value, whereby the scene can be rendered using the determined pixel color, wherein the instructions configured to render images having atmospheric effects by causing

one or more processors to determine a travel distance value comprise instructions configured to cause the one or more processors to:

- initialize the pixel color value;
- determine a back distance value from the reference point to the back face of the fog object and adding the back distance value to a color buffer value; and
- determine a front distance value from the reference point to the front face of the fog object and subtracting the front distance value from the color buffer value, wherein the final color buffer value represents a scaled travel distance through the fog object.

26. (Previously presented) The computer usable storage medium as recited in claim 25 wherein the front distance value and the back distance value are determined using a linear equation.

27. (Previously presented) The computer usable storage medium as recited in claim 25 wherein the travel distance is converted to the fog factor by solving a linear equation.

28. (Previously presented) The computer usable storage medium as recited in claim 25 wherein the travel distance is converted to the fog factor by solving an exponential equation.

29. (Previously presented) The computer usable storage medium as recited in claim 25 wherein the travel distance is converted to the fog factor by solving an exponential-squared equation.